

Fig. 2

ELEMENT NAME LIST	4a
ATTRIBUTE NAME LIST	4b
TEXT CONTENT LIST	-4c
ATTRIBUTE VALUE LIST	
PARTIAL STRUCTURE LIST	10
WHOLE DOCUMENT STRUCTURE DATA	15
	41

Fig. 3

ELEMENT ID	ELEMENT NAME
E01	ELEMENT-NAME-A
E02	ELEMENT-NAME-B
E03	ELEMENT-NAME-C
E04	ELEMENT-NAME-D

Fig. 4

4b

ATTRIBUTE ID	ATTRIBUTE NAME
A01	ATTRIBUTE-NAME-A
A02	ATTRIBUTE-NAME-B
A03	ATTRIBUTE-NAME-C
A04	ATTRIBUTE-NAME-D

Fig. 5

4

ELEMENT ID	TEXT ID	TEXT CONTENT
E01	T01	TEXT-A
E01	T02	TEXT-B
E01	T03	TEXT-C
E02	T04	TEXT-D
	• • •	• • •

Fig. 6

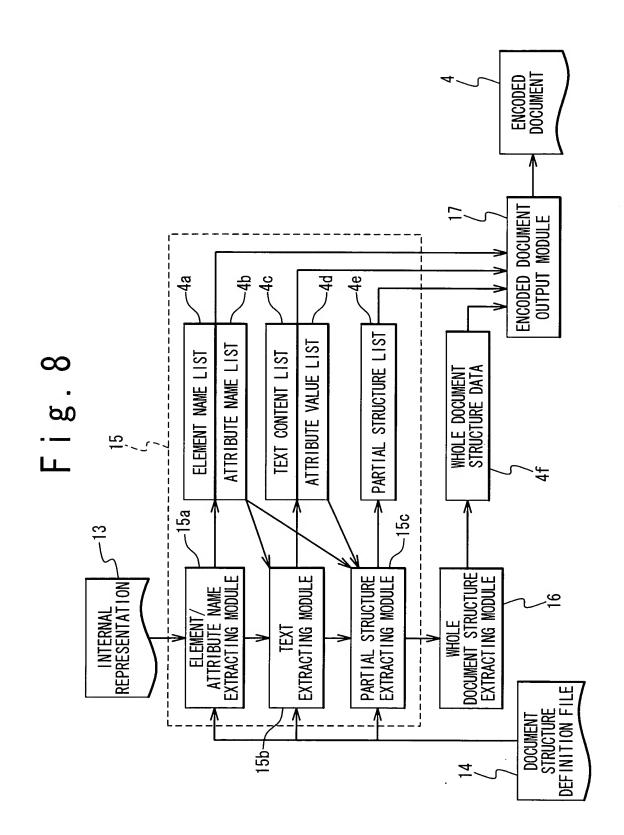
40

ATTRIBUTE ID	TEXT ID	ATTRIBUTE VALUE
A01	T05	TEXT-A
A01	T06	TEXT-B
A01	T07	TEXT-C
A02	T08	TEXT-D

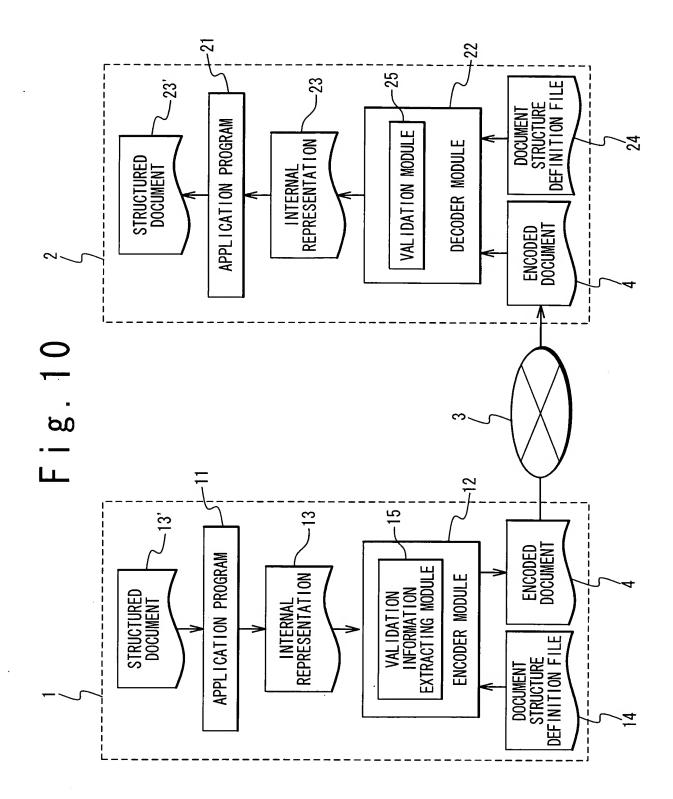
Fig. 7

4e

STRUCTURE ID	PARTIAL STRUCTURE REPRESENTATION
S01	E01 A01 E02 E02
S02	E02 E03 E06 E10
S03	E03 E04 E05
S04	E04 T



ENCODED DOCUMENT DECOMPOSING MODULE **ENCODED DOCUMENT 4**a -4d PARTIAL STRUCTURE LIST ATTRIBUTE VALUE LIST F i g . 9 ATTRIBUTE NAME LIST ELEMENT NAME LIST TEXT CONTENT LIST -27 PARTIAL STRUCTURE VALIDATION MODULE VALIDATION MODULE INTERNAL REPRESENTATION OUTPUT MODULE **REPRESENTATION** TEXT TYPE INTERNAL 25 DOCUMENT STRUCTURE DEFINITION FILE 25b-



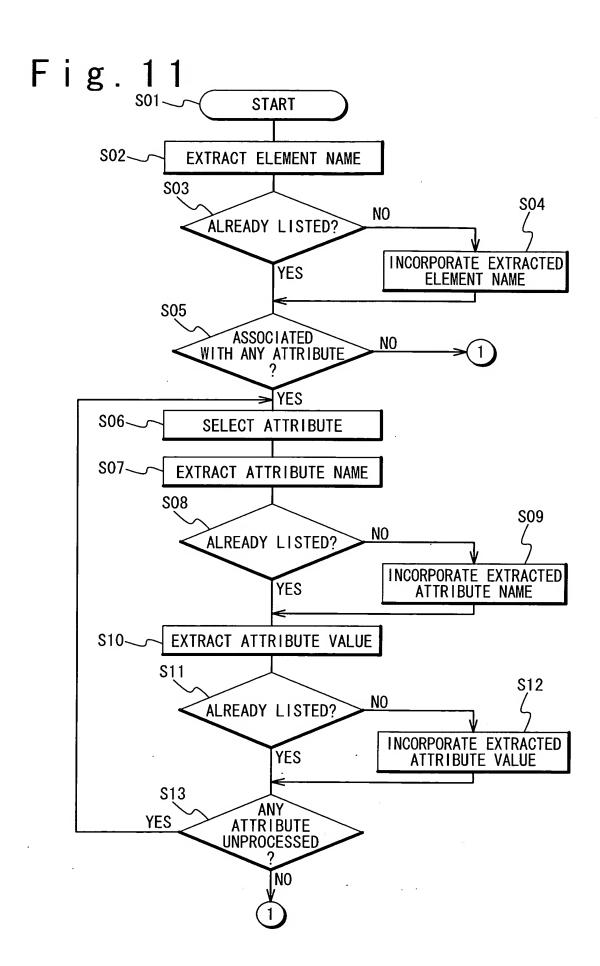
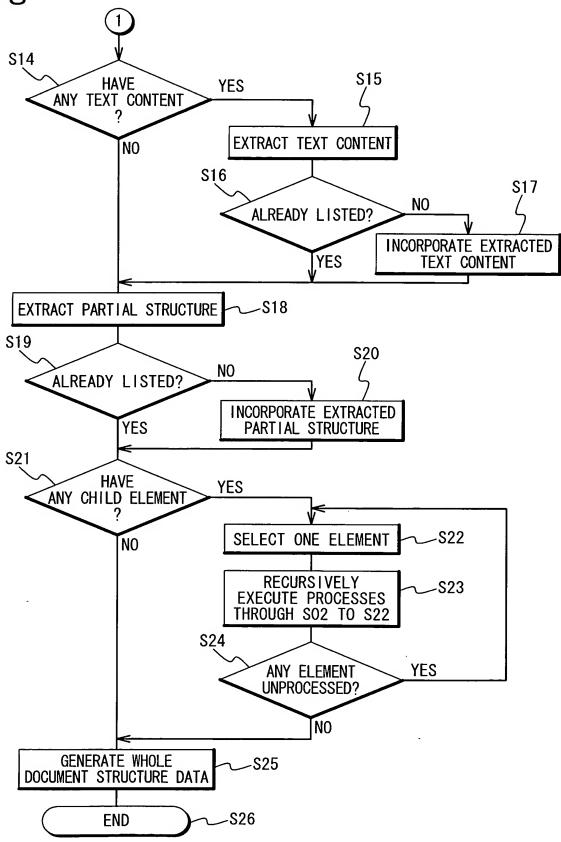


Fig. 12



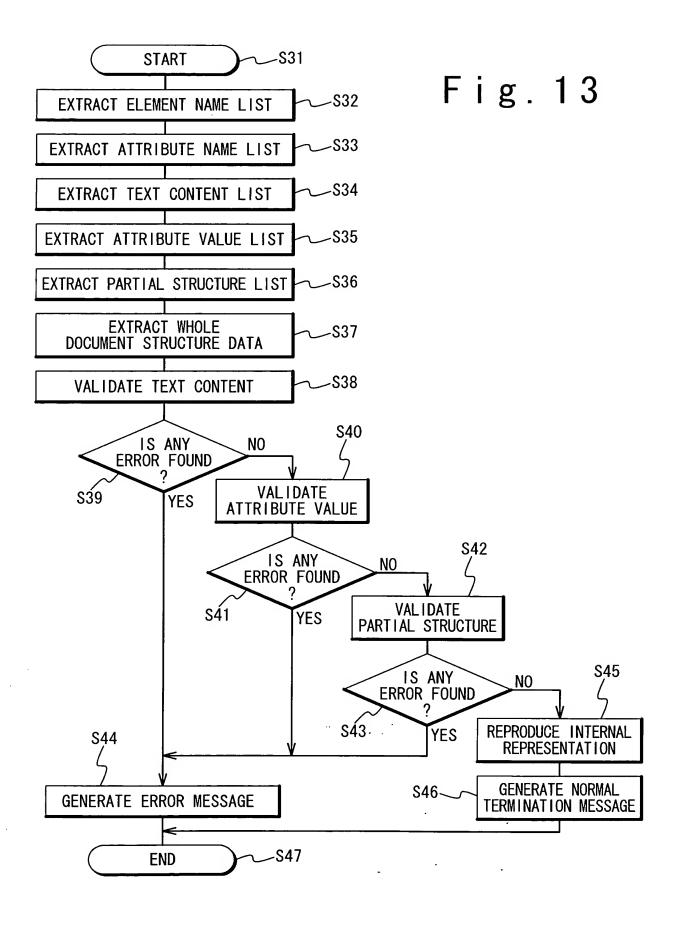


Fig. 14

```
<AddressBook owner="Suzuki">
  <Person>
    <Name>
      <LastName>Yamada</LastName>
      <FirstName>Taro</FirstName>
    </Name>
    <Address>
     <Country>Japan</Country>
      <Prefecture>Kanagawa</prefecture>
     <City>Yokohama</City>
    </Address>
    <Telephone>045-123-4567</Telephone>
  </Person>
  <Person>
    <Name>
     <LastName>Yamada
     <FirstName>Jiro
    </Name>
    <Address>
     <Country>Japan</Country>
     <Prefecture>Kanagawa</Prefecture>
     <City>Kawasaki</City>
     <Ward>Miyamae</Ward>
   </Address>
 </Person>
</AddressBook>
```

Fig. 15

ELEMENT ID	ELEMENT NAME
E01	AddressBook
E02	Person
E03	Name
E04	LastName
E05	FirstName
E06	Address
E07	Country
E08	Prefecture
E09	City
E10	Telephone
E11	Ward

Fig. 16

ATTRIBUTE ID	ATTRIBUTE NAME
A01	owner

Fig. 17

ELEMENT ID	TEXT ID	TEXT CONTENT
E04	T01	Yamada
E05	T02	Taro
E05	T03	Jiro
E07	T04	Japan
E08	T05	Kanagawa
E09	T06	Yokohama
E09	T07	Kawasaki
E10	T08	045-123-4567
E11	T09	Miyamae

Fig. 18

ATTRIBUTE ID	TEXT ID	ATTRIBUTE VALUE
A01	T10	Suzuki

Fig. 19

STRUCTURE ID	PARTIAL STRUCTURE REPRESENTATION
S01	E01 A01 E02 E02
S02	E02 E03 E06 E10
\$03	E03 E04 E05
S04	E04 T
\$05	E05 T
S06	E06 E07 E08 E09
S07	E07 T
S08	E08 T
S09	E09 T
S10	E010 T
S11	E02 E03 E06
S12	E06 E07 E08 E09 E11
S13	E11 T

